

# Notice of Allowability

Application No.

10/829,171

Examiner

Andrew T. Piziali

Applicant(s)

TAKIZAWA ET AL.

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/22/2004.
2. ☒ The allowed claim(s) is/are 10 and 12-17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/988,139.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4/22/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**ANDREW T. PIZIALI**  
**PATENT EXAMINER**

## **DETAILED ACTION**

### ***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Harris Pitlick on 6/22/2006.

Amend the application as follows:

#### **IN THE SPECIFICATION:**

On page 1, line 3, insert the following:

This application is a division of application Serial No. 09/988,139, filed November 19, 2001, now U.S. Patent No. 6,797,436.

#### **IN THE CLAIMS:**

Cancel claim 11.

Amend claim 10 as follows:

10. A solidifying material for a cell electrolyte solution, characterized in that said solidifying material comprises a film or sheet of a polymer having properties that said polymer is insoluble in said cell electrolyte solution but said polymer absorbs and solidifies said cell electrolyte solution, wherein said polymer is a block copolymer comprising, as segments A, a

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polymer non-compatible with said cell electrolyte solution and, as segments B, a polymer compatible with said cell electrolyte solution, and absorbs and solidifies said cell electrolyte solution; a smallest unit of said block copolymer is A-B-A; and to each of said segments B, at least one group selected from the group consisting of a carboxyl group, a hydroxyl group, a sulfonic group, an amino group and a cyclic carbonate group is bonded via a -S- bond or a -C- bond or a graft copolymer comprising, as segments A, a polymer non-compatible with said cell electrolyte solution and, as segments B, a polymer compatible with said cell electrolyte solution, and absorbs and solidifies said cell electrolyte solution; and to each of said segments B, at least one group selected from the group consisting of a carboxyl group, a hydroxyl group, a sulfonic group, an amino group and a cyclic carbonate group is bonded, and a backing reinforcing said film or sheet; and said backing is a woven fabric, a nonwoven fabric or a porous film.

***Examiner's Statement of Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

The closest prior art is US Patent 5,196,484 to Giles et al. which recites ester and methylene linkages, and combinations thereof, but does not suggest carboxyl, hydroxyl, sulfonic, amino or cyclic carbonates as part of the pendant groups on the block copolymer backbone (see column 20, lines 5-21 and column 20, line 66 - column 22, line 12).

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

atp

 6/22/06

**ANDREW T. PIZIALI  
PATENT EXAMINER**